STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

Pine Tree Bioenergy, LLC
Androscoggin County
Auburn, Maine
A-1017-71-A-N (SM)

Departmental
Findings of Fact and Order
Air Emission License

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. Pine Tree Bioenergy, LLC (PTB) has applied for an Air Emission License permitting the operation of emission sources associated with their biomass co-generation facility.

2. The equipment addressed in this license is located 445 Lewiston Junction Road, Auburn, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (ton/hr)	Fuel Type	Stack #
Boiler #1	85	9.5	Wood	1
Boiler #2	85	9.5	Wood	1

Electrical Generation Equipment

Equipment	Maximum Design Capacity	Firing Rate (gal/hr)	Fuel Type, % sulfur	Stack #
Generator #1	400 kW 4.4 MMBtu/hr	31.9	diesel fuel, 0.05%	2

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 760-3143

web site: www.maine.gov/dep

C. Application Classification

The new source is considered a major source based on whether or not expected emissions exceed the "Significant Emission Levels" as defined in the Department's regulations. The emission for the new source are determined by the maximum future license allowed emissions, as follows:

Pollutant	Max. Future License (TPY)	Sig. Level
PM	7.7	100
PM_{10}	7.7	100
SO_2	31.6	100
NO_x	98.0	100
CO	99.8	100
VOC	31.6	50

The Department has determined the facility is a minor source and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005). With the fuel limit on Boilers #1 and #2 and the operating hours restriction on Generator #1, the facility is licensed below the major source thresholds and is considered a synthetic minor.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Boilers #1 and #2

PTB is proposing to construct a 9 MW wood fired (biomass) co-generation facility. The facility will consist of two 85 MMBtu/hr biomass boilers that will breech to a common 45-foot stack. PTB may extract steam for internal use and/or distribution to neighboring companies.

The fuel will consist of clean wood waste (i.e. wood chips, limbs, bark, land clearing materials, saw dust, etc.) and/or whole tree chips. Emissions to the common stack will be controlled by use of multicyclones, an electrostatic precipitator, and employing a boiler design that includes gasification technology and staged air combustion. PTB may also utilize a Selective Non-Catalytic Reduction system.

Boilers #1 and #2 each have maximum heat inputs greater than 10 MMBtu/hr. Therefore both of these boilers are subject to the New Source Performance Standards (NSPS) Subpart Dc for steam generating units greater than 10 MMBtu/hr manufactured after June 9, 1989.

PTB performed a detailed BACT analysis for Boilers #1 and #2 for PM, NOx, and CO.

PM

PTB evaluated the following control strategies in their BACT analysis for PM: mechanical collectors (cyclones), wet scrubbers, electrostatic precipitators (ESPs), fabric filters, and good combustion practices.

A multicyclone followed by an ESP represents the highest level of control available for PM. The use of a multiclone, an ESP, good combustion practices to ensure complete combustion to minimize the formation of PM, and an emission limit of 0.012 lb/MMBtu represent BACT for PM for Boilers #1 and #2.

NO_x

PTB evaluated the following control strategies in their BACT analysis for NO_x: Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), Regenerative Selective Catalytic Reduction (RSCR), and good combustion practices.

SCR reduces NO_x in the exhaust stream to form nitrogen and water. In this process, ammonia, serving as the reducing agent, is injected into the exhaust where the reduction takes place in the presence of a catalyst. The reduction is considered "selective" because the catalyst selectively targets NO_x reduction when ammonia is present. The catalyst material is generally a precious metal

such as tungsten, vanadium, or titanium. The use of chipped wood and saw dust will create fine particulates that will likely plug the catalyst and considerably reduce the effectiveness of the SCR system. Additionally, sticky ammonia salts will likely be formed from the reaction of acid gases and residual ammonia which will also add to the plugging/blinding of the catalyst. These problems require frequent catalyst replacement which result in prohibitively high operating costs.

RSCR is a modified SCR system which is located downstream of the ESP to minimize particulate blinding of the catalyst. RSCR removes NO_x from the exhaust stream by using ammonia injection and a catalytic reduction process. Because of the cooler stack temperatures in this location, considerable additional heat must be added to raise the temperature of the flue gas to a range that will provide optimum catalytic performance. Additionally, an RSCR system requires considerable space for the ammonia reagent to mix with the flue gas prior to contacting the catalyst.

SNCR involves injecting the ammonia into the boiler cavity at pre-determined locations and rates. This process can reduce NO_x emissions by 35 to 75 percent.

An emission limit of 0.15 lb/MMBtu for the first 21 months after initial startup and 0.10 lb/MMBtu thereafter was determined to be BACT for NO_x. PTB will use good combustion practices and SNCR as necessary to meet this emission limit.

CO

PTB evaluated the following control strategies in their BACT analysis for CO: good combustion practices.

Add-on control technologies for CO emissions have not been developed for boilers as reflected in a review of EPA's RACT/BACT/LAER Clearinghouse. Boilers #1 and #2 will employ gasification technology and staged air combustion as part of good combustion practices. An emission limit of 0.157 lb/MMBtu was determined to be BACT for CO. PTB will use good combustion practices to meet this emission limit.

A summary of the BACT analysis for Boilers #1 and #2 is the following:

1. The total fuel use for the facility shall not exceed 140,000 ton/year (12-month rolling total) of wood based on a moisture content of 50%.
2. PTB shall use the following formula, when necessary, to convert fuel use records to 50% moisture:

   Tons Wood at 50% = (Tons Wood at M%) x [(100-M)/50]

   where M = the moisture content of the actual wood fired

3. PTB shall continuously operate the multicyclone and ESP on the exhaust from Boilers #1 and #2 when either boiler is in operation.
4. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103 (last amended November 3, 1990) regulates PM emission limits. Also, 40 CFR 60.43c(e) contains an applicable PM emission limit. However, in this case a BACT analysis determined a more stringent limit of 0.012 lb/MMBtu was more appropriate and shall be used. The PM_{10} limits are derived from the PM limits.
5. SO_2, NO_x, CO, and VOC emission limits are based on a BACT analysis provided with their application dated 5/09.
6. Visible emissions from the combined stack for Boilers #1 and #2 shall not exceed 15% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute period per hour of not more than 27% opacity.

C. Generator #1

PTB proposes to install an emergency generator, Generator #1.

"Emergency Generator" is defined as any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary engines used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary engines used to pump water in the case of fire or flood. Stationary engines used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Generator #1 was ordered after July 11, 2005 and manufactured after April 1, 2006. Therefore, Generator #1 is subject to New Source Performance Standards 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*.

A summary of the BACT analysis for Generator #1 (400 kW) is the following:

1. Generator #1 shall fire only diesel fuel with a maximum sulfur content not to exceed 500 ppm.
2. Beginning October 1, 2010, Generator #1 shall fire only diesel fuel with a maximum sulfur content not to exceed 15 ppm.
3. Generator #1 shall be limited to 100 hr/yr of operation for maintenance checks and readiness testing. Generator #1 shall be limited to 500 hours per year of total operation. Both of these limits are based on a 12 month rolling total.

Compliance shall be demonstrated by a written log of all generator operating hours.

4. Generator #1 shall be equipped with a non-resettable hour meter.
5. 06-096 CMR 103 regulates PM emission limits. The PM_{10} limits are derived from the PM limits.
6. NO_x, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
7. PTB shall operate and maintain Generator #1 in accordance with the manufacturer's written instructions. PTB shall not change settings that are not approved in writing by the manufacturer.
8. Visible emissions from Generator #1 shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

D. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

E. Annual Emissions

PTB shall be restricted to the following annual emissions, based on a 12 month rolling total:

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	PM_{10}	SO_2	NO_x	CO	VOC	HAP (total / single)
Boilers	7.6	7.6	31.5	81.9	98.9	31.5	--
Generator #1	0.1	0.1	0.1	3.5	0.9	0.1	--
Total TPY	**7.7**	**7.7**	**31.6**	**98.0**	**99.8**	**31.6**	**9.9 / 24.9**

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a minor new source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-1017-71-A-N subject to following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either

the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [06-096 CMR 115]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:

1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department

that equipment may be operating out of compliance with emission standards or license conditions; or

2. pursuant to any other requirement of this license to perform stack testing.

B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) **Boilers #1 and #2**

A. Total fuel use for Boilers #1 and #2 combined shall not exceed 140,000 tons/yr at 50% moisture (or equivalent) of clean wood waste and/or whole tree chips. Records of annual fuel use shall be kept on a 12-month rolling total basis. [06-096 CMR 115, BACT]

B. PTB shall not fire Construction and Demolition wood in Boilers #1 or #2. [06-096 CMR 115, BACT]

C. Emissions from Boilers #1 and #2 each shall not exceed the following:

Pollutant	lb/MMBtu	Origin and Authority
PM	0.012	06-096 CMR 115, BACT
NO_x	0.15*	06-096 CMR 115, BACT
CO	0.157	06-096 CMR 115, BACT

*An emission limit for NO_x of 0.15 lb/MMBtu shall apply for the first 21 months following initial startup. After this time period, an emission limit for NO_x of 0.10 lb/MMBtu shall apply unless PTB is able to demonstrate to the Department's satisfaction that a less stringent limit is more appropriate.

D. Emissions from Boilers #1 and #2 combined shall not exceed the following:

Pollutant	ppmv	Origin and Authority
NH_3	20* @ 7% O_2	06-096 CMR 115, BACT

*An emission limit for NH_3 of 20 ppmv shall apply for the first 21 months following initial startup. After this time period, an emission limit for NH_3 of 10 ppmv shall apply.

E. For the first 21 months after initial startup emissions shall not exceed the following [06-096 CMR 115, BACT]:

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	1.02	1.02	4.25	12.75	13.35	1.45
Boiler #2	1.02	1.02	4.25	12.75	13.35	1.45

F. After the first 21 months after initial startup emissions shall not exceed the following [06-096 CMR 115, BACT]:

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	1.02	1.02	4.25	8.50	13.35	1.45
Boiler #2	1.02	1.02	4.25	8.50	13.35	1.45

G. PTB shall operate and maintain a multicyclone and an electrostatic precipitator (ESP) on the combined emissions from Boilers #1 and #2 for the control of particulate matter. PTB shall operate, at a minimum, the number of fields which successfully demonstrated compliance during the most recent PM stack test. [06-096 CMR 115, BACT]

H. Compliance with the PM lb/MMBtu and lb/hr emission limits shall be demonstrated by stack testing within 60 days after achieving the maximum production rate at which the facility will be operated but not later than 180 days after the initial start-up of the facility. Compliance stack testing shall be performed annually thereafter.
[06-096 CMR 115, BACT and 40 CFR 60.45c(a)]

I. Compliance with the NO_x lb/MMBtu emission limit shall be demonstrated by means of a portable NO_x monitoring system and will consiste of once daily emission measurements. Compliance shall be based on a 30-day rolling average basis. Within 60 days after initial startup, PTB will submit a QA/QC plan which identifies the analyzer make and model, ampling location and methodology, data management, and audit plan for approval by the Department. Within 60 days after initial startup PTB will begin recording the daily measurements. Periods of startup, shutdown, and equipment malfunction shall not be included in determining the 30-day rolling arithmetic average emission rates provided that operating records are available to

demonstrate that the facility was being operated to minimize emissions. [06-096 CMR 115, BACT]

J. Compliance with the NO_x lb/hr emission limit shall be demonstrated by stack testing within 60 days after achieving the maximum production rate at which the facility will be operated but not later than 180 days after the initial start-up of the facility. Thereafter, compliance stack testing shall be performed upon request of the Department. [06-096 CMR 115, BACT]

K. Compliance with the CO lb/MMBtu and lb/hr emission limit shall be demonstrated by stack testing within 60 days after achieving the maximum production rate at which the facility will be operated but not later than 180 days after the initial start-up of the facility. Compliance stack testing shall be performed annually thereafter. [06-096 CMR 115, BACT]

L. Compliance with the SO_2 and VOC lb/hr limits shall be demonstrated by stack testing upon request by the Department. [06-096 CMR 115, BACT]

M. Compliance with the NH_3 ppmv emission limit shall be based on a 1-hour average demonstrated by stack testing within 60 days after achieving the maximum production rate at which the facility will be operated but not later than 180 days after the initial start-up of the facility. Compliance stack testing shall be performed annually thereafter. [06-096 115, BACT]

N. PTB shall maintain and operate a continuous opacity monitor (COM) on the combined stack for Boilers #1 and #2. The COM shall meet the monitoring requirements of 40 CFR Part 60.13 as well as 40 CFR Part 60, Appendix B. The COM shall be certified and operational within 60 days after achieving the maximum production rate at which the facility will be operated but no later than 180 days after the initial startup of the facility. [40 CFR 60.47c(a)]

O. PTB shall monitor and record the following as specified for the ESP associated with Boilers #1 and #2 [06-096 CMR 115, BACT]:

Item to be Monitored	Monitor	Record
ESP Applied Voltage	continuously	every 12 hours
ESP Applied Amperage	continuously	every 12 hours

P. The opacity from the combined stack for Boilers #1 and #2 shall not exceed an opacity of 15% on a six (6) minute block average except for one (1) six (6) minute block average per hour of not more than 27% opacity. This opacity standard shall apply at all times that either boiler is in operation that is not

considered a period of startup, shutdown, and malfunction. [06-096 CMR 115, BACT]

Q. PTB shall submit notification to EPA and the Department of the date of construction, anticipated start-up, and actual start-up. This notification shall include the design heat input capacity of the boilers and the type of fuel to be combusted. [40 CFR 60.48c(a)]

R. PTB shall submit excess opacity emissions and monitoring systems performance reports to the Department semiannually. All reports shall be postmarked by the 30th day following the end of each six month period. [40 CFR 60.48c(c)]

S. PTB shall record and maintain records of the amounts of each fuel combusted in each boiler during each day. [40 CFR 60.48c(g)(2)]

(17) **HAP Limits**

Facility wide emissions of HAPs listed in Section 112(b) of the Clean Air Act shall not exceed 9.9 ton/year for any single HAP and 24.9 ton/year for all HAPs combined, both based on a 12-month rolling total. Compliance shall be demonstrated by stack testing Boilers #1 and #2 for specific HAPs including, but not limited to, HCl. Stack testing shall take place within 60 days after achieving the maximum production rate at which the facility will be operated but not later than 180 days after the initial start-up of the facility. Thereafter, stack testing shall be performed upon request by the Department. [06-096 CMR 115, BACT]

(18) **Generator #1**

A. Generator #1 shall fire only diesel fuel with a maximum sulfur content not to exceed 500 ppm. [40 CFR 60.4207(a)]

B. Beginning October 1, 2010, Generator #1 shall fire only diesel fuel with a maximum sulfur content not to exceed 15 ppm. [40 CFR 60.4207(b)]

C. Generator #1 shall be limited to 100 hr/yr of operation for maintenance checks and readiness testing. Generator #1 shall be limited to 500 hours per year of total operation. Both of these limits are based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours. [40 CFR 60.4211(E) and 06-096 CMR 115, BACT]

D. Generator #1 shall be equipped with a non-resettable hour meter. [40 CFR 60.4209(a)]

E. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #1	PM	0.12	06-096 CMR 103(2)(B)(1)(a)

F. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.52	0.52	0.22	13.98	3.71	0.39

G. Generator #1 is subject to PM, CO, and NO_x + VOC emission requirements set forth in 40 CFR 60, Subpart IIII. Compliance with these emission requirements shall be demonstrated by certification from the manufacturer that this engine class meets the appropriate Tier standards. [40 CFR 60, Subpart IIII]

H. PTB shall operate and maintain Generator #1 in accordance with the manufacturer's written instructions. PTB shall not change settings that are not approved in writing by the manufacturer. [40 CFR 60.4211(a)]

I. Visible emissions from the back-up generators shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(19) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

(20) **Parameter Monitors**

The ESP applied amperage and voltage are identified as parameter monitors. Each parameter monitor must record accurate and reliable data. If the parameter monitor is recording accurate and reliable data less than 98% of the source operating time within any quarter of the calendar year, the Department may

initiate enforcement action and may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions. [06-096 CMR 115, BACT]

(21) **Annual Emission Statement**
In accordance with *Emission Statements*, 06-096 CMR 137 (last amended November 8, 2008), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

1) A computer program and accompanying instructions supplied by the Department; or
2) A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted as specified by the date in 06-096 CMR 137.

(22) PTB shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 26th DAY OF June , 2009.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, COMMISSIONER

The term of this license shall be five (5) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 5/13/09
Date of application acceptance: 5/14/09

Date filed with the Board of Environmental Protection: _____

This Order prepared by Lynn Ross, Bureau of Air Quality.